

**Title Con, 2019**

# So, What Do You Know?

**Creating Formative Assessments**

Dr. Charity Flores, Director of Student Assessment  
Mary Williams, Assessment Specialist

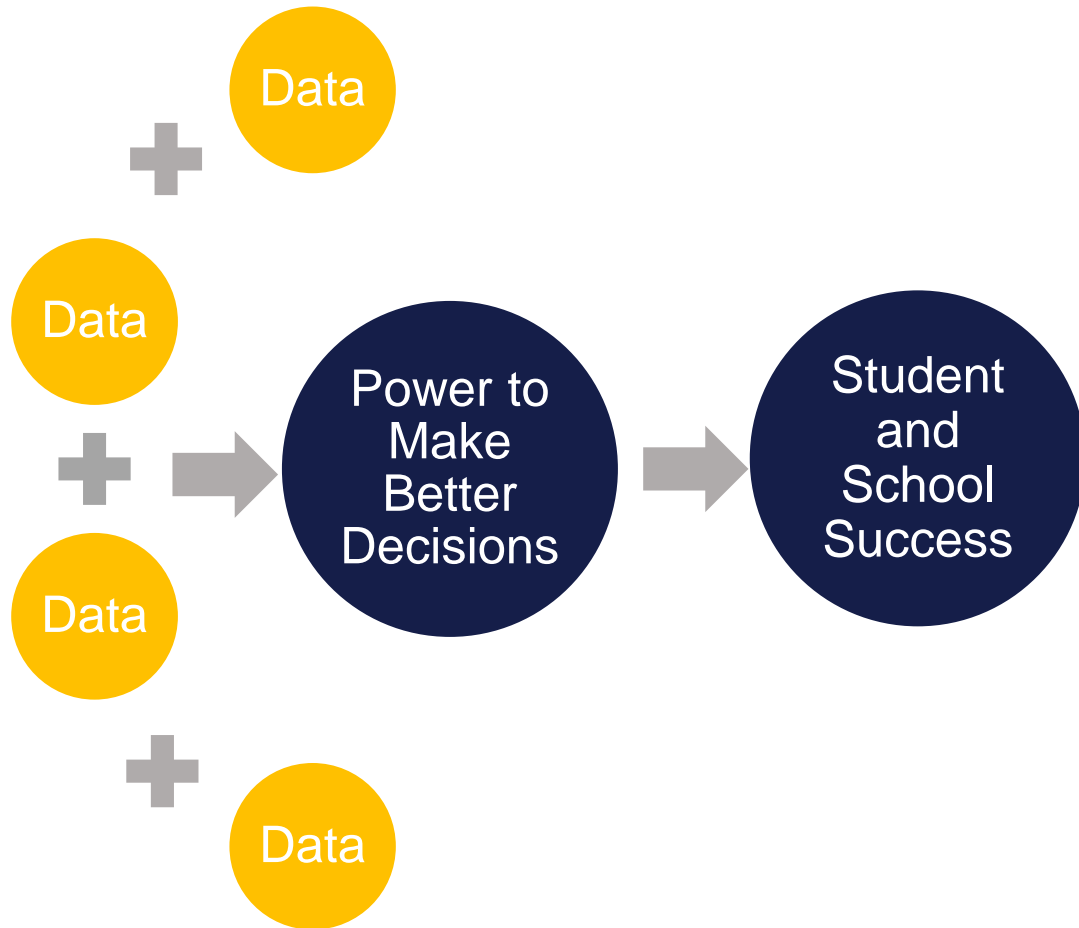




What is assessment to you?  
How would you define or  
describe assessment?



# Formative Assessment



An **intentional process** teachers and students use to **reveal** learning, **analyze** learning, and **adjust** both instruction and learning strategies to enhance students' achievement of intended outcomes.



# Creating a Performance Level Descriptor (PLD)

- What are the different performance/achievement levels you want to track?

Example Learning Continuum/PLD

Level 1	Level 2	Level 3	Level 4
Starting at the beginning	Has achieved parts of the skill	Has achieved focal aspect of the skill	Has extended/applied the skill



# Creating a PLD

- What are different levels of rigor that need to be included?

## Hess' Cognitive Rigor Matrix (Example)

Revised Bloom's Taxonomy	Webb's DOK Level 1 Recall & Reproduction	Webb's DOK Level 2 Skills & Concepts	Webb's DOK Level 3 Strategic Thinking/ Reasoning	Webb's DOK Level 4 Extended Thinking
<b>Remember</b> Retrieve knowledge from long-term memory, recognize, recall, locate, identify	<ul style="list-style-type: none"> <li>Recall, recognize, or locate basic facts, details, events, or ideas explicit in texts</li> <li>Read words orally in connected text with fluency &amp; accuracy</li> </ul>			
<b>Understand</b> Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion), predict, compare/contrast, match like ideas, explain, construct models	<ul style="list-style-type: none"> <li>Identify or describe literary elements (characters, setting, sequence, etc.)</li> <li>Select appropriate words when intended meaning/definition is clearly evident</li> <li>Describe/explain who, what, where, when, or how</li> <li>Define/describe facts, details, terms, principles</li> <li>Write simple sentences</li> </ul>	<ul style="list-style-type: none"> <li>Specify, explain, show relationships; explain why, cause-effect</li> <li>Give non-examples/examples</li> <li>Summarize results, concepts, ideas</li> <li>Make basic inferences or logical predictions from data or texts</li> <li>Identify main ideas or accurate generalizations of texts</li> <li>Locate information to support explicit-implicit central ideas</li> </ul>	<ul style="list-style-type: none"> <li>Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference)</li> <li>Identify/ make inferences about explicit or implicit themes</li> <li>Describe how word choice, point of view, or bias may affect the readers' interpretation of a text</li> <li>Write multi-paragraph composition for specific purpose, focus, voice, tone, &amp; audience</li> </ul>	<ul style="list-style-type: none"> <li>Explain how concepts or ideas specifically relate to <i>other</i> content domains or concepts</li> <li>Develop generalizations of the results obtained or strategies used and apply them to new problem situations</li> </ul>
<b>Apply</b> Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task	<ul style="list-style-type: none"> <li>Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning of words</li> <li>Apply rules or resources to edit spelling, grammar, punctuation, conventions, word use</li> <li>Apply basic formats for documenting sources</li> </ul>	<ul style="list-style-type: none"> <li>Use context to identify the meaning of words/phrases</li> <li>Obtain and interpret information using text features</li> <li>Develop a text that may be limited to one paragraph</li> <li>Apply simple organizational structures (paragraph, sentence types) in writing</li> </ul>	<ul style="list-style-type: none"> <li>Apply a concept in a new context</li> <li>Revise final draft for meaning or progression of ideas</li> <li>Apply internal consistency of text organization and structure to composing a full composition</li> <li>Apply word choice, point of view, style to impact readers' /viewers' interpretation of a text</li> </ul>	<ul style="list-style-type: none"> <li>Illustrate how multiple themes (historical, geographic, social) may be interrelated</li> <li>Select or devise an approach among many alternatives to research a novel problem</li> </ul>

# Creating a PLD

## 4.RL.2.3

Describes in depth a character, setting, or event in a story or play, drawing on specific details in the literary text, and how that impacts the plot.

- Which terms represent content/skills?
- Which terms represent complexity?
- Which terms lend themselves toward describing students at the proficient level?



# Creating a PLD: Example

4.RL.2.3 Describes in depth a character, setting, or event in a story or play, drawing on specific details in the literary text, and how that impacts the plot.

Level 1	Level 2	Level 3	Level 4
<b>Identifies</b> a character, setting, or event in a story or play, drawing on <b>explicitly stated details</b> in the literary text.	<b>Describes</b> a character, setting, or event in a story or play, drawing on <b>explicitly stated details</b> in the literary text, <b>and how that impacts the plot.</b>	<b>Describes in depth</b> a character, setting, or event in a story or play, <b>drawing on specific details</b> in the literary text, and how that impacts the plot.	<b>Analyzes in depth</b> a character, setting, or event in a story or play, <b>drawing on implicit details</b> in the literary text, and how that impacts the plot.



# Creating a PLD: Large Group Practice

## Math.5.M.3

Develop and use formulas for the area of triangles, parallelograms, and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area...

- Which terms represent complexity?
- Which terms represent content?
- Which terms lend themselves toward describing students at the proficient level?
- How might complexity change across performance levels?
- How might content change across performance levels?





# Creating a PLD: Large Group Practice

5.M.3. Develop and use formulas for the area of triangles, parallelograms, and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures.

Level 1	Level 2	Level 3	Level 4
<b>Substitutes</b> values into a formula for area of triangles, parallelograms, and trapezoids.	<b>Uses</b> formulas for the area of triangles, parallelograms, and trapezoids.	<b>Solves</b> real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms, and trapezoids, using appropriate units for measure	<b>Solves</b> more complex real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms, and trapezoids, using appropriate units for measures. <b>Develops</b> equivalent formulas to given formulas to find the areas of triangles, parallelograms, and trapezoids.



# Creating a PLD: Small Group Activity



- ✓ Create a PLD
  - ✓ Choose an academic standard
  - ✓ Identify content and complexity
    - ✓ Think about how the content and complexity change across performance levels
  - ✓ Write descriptors for each level.



# Creating a Formative Assessment

*How do I get information about where my students are?*

Create 1-3 tasks to measure ability at each level.

Organize your tasks into a short formative activity.

Communicate the purpose and procedure with students.



# Creating a Formative Assessment: Example

1. The formula for the area of a triangle is  $A = (1/2)bh$ .

A triangle has a base (b) that is 8 inches and height (h) that is 3 inches. What is the area of this triangle?

Level 1  
Questions

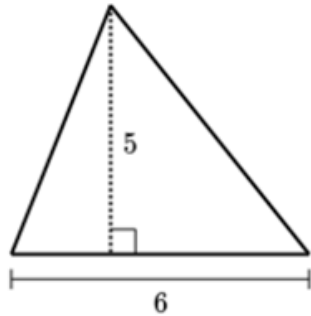
2. The formula for the area of a trapezoid is  $A = \frac{(b1 + b2) \times h}{2}$

A trapezoid has a base 1 (b1) that is 3 inches, base 2 (b2) that is 4 inches, and height (h) that is 2 inches. What is the area of this trapezoid?



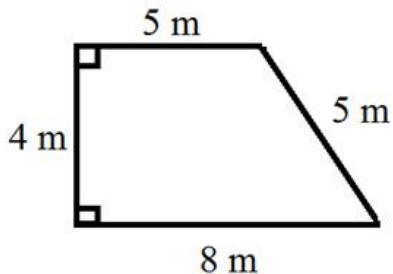
# Create a Formative Assessment: Example

3. The formula for the area of a triangle is  $A = \frac{1}{2}bh$ .  
What is the area of this triangle?



Level 2  
Questions

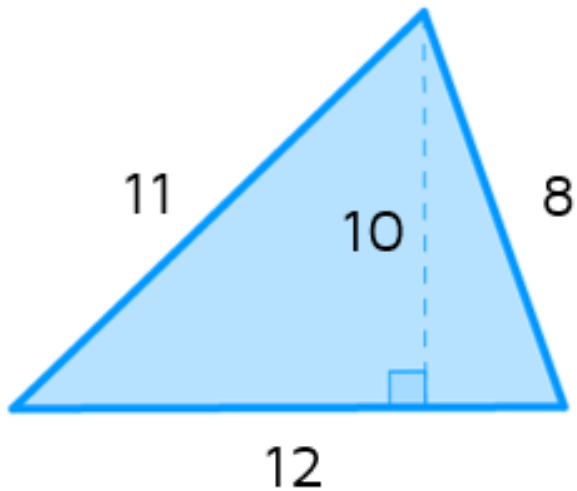
4. The formula for the area of a trapezoid is  $A = \frac{(b_1 + b_2) \times h}{2}$ .  
What is the area of this trapezoid?



# Create a Formative Assessment: Example

5. DeAndre keeps goats in a pen behind his house. He wants to cover the ground in the pen with fresh straw. How many square feet of ground does DeAndre need to cover?

Level 3  
Questions

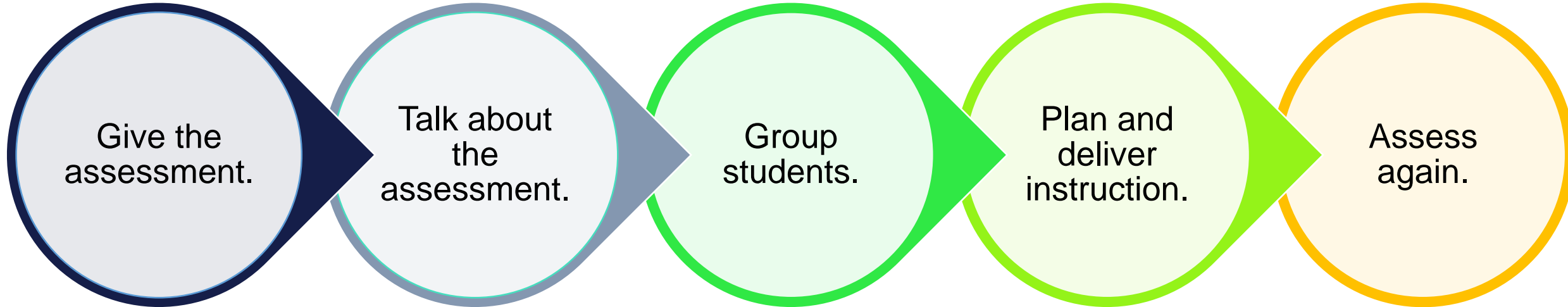


DeAndre's goat pen.  
Measurements are in feet.

6. DeAndre wants to put a new fence around his goat pen. How many feet of fencing will he need?



# Using the Data



# Using Formative Assessments to Make a Difference

Identify Content  
and Complexity  
Required



Create Learning  
Continuum  
(PLD)



Gather Data on  
Students Now

Target  
Instruction



Gather Data on  
Change after  
Instruction



Celebrate  
Growth! Target  
Needs!





# Thank You!

Please reach out to the Office of Student Assessment for further support or to share your experiences with formative assessment and student growth!

Dr. Charity Flores  
[cflores@doe.in.gov](mailto:cflores@doe.in.gov)  
317-232-9051

Mary Williams  
[mwilliams@doe.in.gov](mailto:mwilliams@doe.in.gov)  
317-234-5602

